

# GEORGE AIR FORCE BASE

AFCEE Operations by Delivery Order

August 18-31, 2002

## Montgomery Watson Harza, Inc.

### Full Service Remedial Action Contractor (AFRAC)

**Contract Number: F41624-94-D-8089**

**Delivery Order: 05**

(Base wide Groundwater Monitoring and Decommissioning of IRP Site WP-17).

- At Site WP-17, the electrical meter was installed on 9 May 2002, and power was connected on 10 May 2002. One (1) round of respiration testing and analytical sampling of all the wells was performed on 16 May 2002. The vapor analytical results were nondetect for all probe intervals except for the middle interval of the 20 foot monitoring probe (MP-1A). The vapor results for MP-1A were nondetect for benzene, 30 parts per million by volume (ppmv) for toluene, 20 ppmv for ethylbenzene, 36 ppmv for total xylenes, and 5,890 ppmv for total volatile petroleum hydrocarbons (TVPH) gasoline. The site is being costed for a dig-and-haul-removal of approximately 600 cubic yards of shallow (10-30 feet below ground surface) contaminated soil and a pocket of contaminated soil at 55 feet bgs above the petroleum clean-up goals that were established in the Operable Unit (OU) 3 Record Of Decision (ROD). System re-start will be based on the evaluation of the cost proposal for the dig-and-haul removal.

- The groundwater results from the July 2002 Focused Monitoring Event for monitoring well MW-107 was 2.2 microgram/liter ( $\mu\text{g/L}$ ) for Trichloroethene (TCE) which is below the "trigger" value. Therefore, extraction well EW-17 will not be turned on for 6 months. The trigger value is 2.5  $\mu\text{g/L}$  of TCE (one half Maximum Contaminant Level [MCL] which is 5.0  $\mu\text{g/L}$  for TCE) for two consecutive sampling events for a perimeter well.

### World Wide Contract

**Contract Number: F41624-97-D-8013**

**(Delivery Order: 30**

(Underground Storage Tank Removal and Investigation, the Remedial Conversion at IRP Site OT-51, and Well NZ-55 Conversion to Extraction Well).

- On 30 July 2002, AFCEE contacted the contractor to ask if the re-allocated funds for the removal and closure of three underground storage tanks (USTs) at Building 749 were sufficient to complete the project. The contractor agreed he could complete the project with the re-allocated funds. The project will require the removal and closure of the three USTs and a Phase II, UST Closure Report. Currently, a subcontractor is being placed under contract.

### Preliminary Assessment/Remedial Design (PARD)

**Contract Number: F41624-97-D-8017**

**Delivery Order: 42**

(OU-1 TCE Plume RA-O, FT-19a and FT-19c RA-O, OT-51 RA-O, Landfill RA-O).

- At IRP Site OT-51, the soil vapor extraction (SVE) unit has operated continuously until 31 July 2002 when the unit experienced carburetor malfunctions. Since the engine was rebuilt in January 2002, the carburetor replacement is under warranty by the manufacturer. On 16 May 2002, an influent vapor sample from the SVE was collected for analysis by EPA Method TO-3 for BTEX and TVPH, and the influent vapor concentrations was 2,200 ppmv and the effluent was 14 ppmv (99% destruction). The ***Draft Final, Site OT-51 Vapor Point Installation Work Plan*** was received on 19 August 2002 for Air Force and regulatory review, and comments are due by 18 September 2002. Field work is scheduled for 9 September 2002.

- During a 15 August 2002 site visit, well NZ-55 had a 82 percent operation efficiency rate with a groundwater extraction rate of 10.0 gallons per minute (gpm). A groundwater sample was collected on 13 June 2002, and the analytical result for TCE was 485 parts per billion (ppb). Since groundwater extraction was started on 28 December 2001, approximately 2,483,974 gallons of water have been treated with an average TCE concentration of 520 ppb, and an estimated 11.8 pounds of TCE has been removed.

- The pump and treat system operated for 299 hours (89%) during this reporting period. During this time frame, the system treated 5.5 million gallons of groundwater with an average flow rate of 306 gpm. The effluent discharge point was changed from southwest pond to the northeast pond on 9 August 2002. The extraction rate from each well was as follows:

EW-1 (U) flow rate is 17 gpm and the pump cycles on 74% of the time,  
EW-2 (U) flow rate is 13 gpm and the pump cycles on 74% of the time,

## Montgomery Watson Harza, Inc.

### PARD (Continued)

**Contract Number:** F41624-97-D-8017

**Delivery Order:** 42

(OU-1 TCE Plume RA-O; FT-19a and FT-19c RA-O; OT-51 RA-O; Landfill RA-O).

EW-3 (U) flow rate is 21 gpm and the pump cycles on 74% of the time,  
EW-4 (U) flow rate is 6 gpm and the pump cycles on 74% of the time,  
EW-5 (U) flow rate is 1 gpm and the pump cycles on 74% of the time,  
EW-6 (L) pump is shut down,  
EW-7 (L) flow rate is 19 gpm and the pump cycles on 74% of the time,  
EW-8 (L) flow rate is 67 gpm and the pump cycles on 74% of the time,  
EW-9 (U) flow rate is 0 gpm and the pump cycles on 0% of the time,  
EW-10 (U) flow rate is 0 gpm and the pump cycles on 89% of the time,  
EW-11 (U) flow rate is 2 gpm and the pump cycles on 89% of the time,  
EW-12 (U) flow rate is 2 gpm and the pump cycles on 30% of the time,  
EW-13 (U) flow rate is 2 gpm and the pump cycles on 89% of the time,  
EW-14 (L) pump is shutdown,  
EW-15 (L) pump is shutdown,  
EW-16 (L) pump is shutdown,  
EW-17 (L) pump is shutdown,  
EW-18 (L) flow rate is 126 gpm and the pump cycles on 89% of the time.

(U) = Upper Aquifer extraction well,

(L) = Lower Aquifer extraction well.

#### NOTES:

The submersible pump in well EW-9 and the flowmeter at well EW-10 were replaced on 30 August 2002. The collection of third quarter influent and effluent water samples was performed on 15 August 2002, and the influent TCE concentration was 15 ppb and the effluent was non detect.

- The *Process Monitoring Report, Second Quarter 2002, OU 1 Groundwater Extraction/Treatment System* was received on 15 July 2002. The pump and treat system has cumulatively treated since December 1991 an estimated 1.46 billion gallons of groundwater with approximately 204 pounds of TCE remediated from the subsurface. During this quarterly (3 months) reporting period, 16 pounds (35.2 kilograms) of TCE was removed from 38 million gallons of extracted groundwater.
- The operation of the bioventing system at Site FT-19a has been continuous since the system was re-started on 28 March 2002. During the latest respiration test, analytical samples were collected for EPA Method TO-3 for BTEX and TVPH, and TVPH vapor concentrations at the monitoring probes were over 500 ppmv. The HDPP water pipeline and natural gas line have been installed in the area of FT-19a.
- The SVE unit at Site FT-19c was turned off 12 July 2001 for quarterly vapor sampling and field measurements, and the data indicated a pulse test was warranted. Presently, the site is recommended for an extensive vapor-sampling event of all extraction wells and monitoring probes will be analyzed by EPA Method TO-3 for BTEX and TVPH, and TO-14 for TCE. The event is scheduled for fall 2002. A funding line adjustment (FLA) was awarded on 21 August 2002 to complete the extensive sampling event.

### Site Characterization of the Original and Second Sheet Range and Data Gap Investigation

**Contract Number:** F41624-00-D-8022

**Delivery Order:** 49

(Skeet Range Delineation and Data Gap Investigation).

- The *Draft, Engineering Evaluation/Cost Analysis (EE/CA) for the Second Skeet Range* was received on 10 June 2002 for Air Force and regulatory review. Comments were due by 1 July 2002. RWQCB sent an e-mail message on 21 June 2002 stating they had no comments, and EPA comments were received on 28 June 2002. Air Force comments were received on 26 July 2002. The draft final version is scheduled to be issued on 6 September 2002.
- The *Draft, Sampling and Analysis Plan Addendum, TCE Data Gap Investigation* was received on 19 August 2002 for Air Force and regulatory review. Comments are due by 16 September 2002.

## Montgomery Watson Harza, Inc.

### 3P+ A&E Services Contract

**Contract Number:** F41624-00-D-8022

**Delivery Order:** 58

(Phase II Old Base Production Wells and Monitoring Wells Decommissioning).

- The *Draft, Phase 2 Well Destruction Work Plan for Wells 27N1, 26H1, 30F1, 30F2, 34F1, MW-(72, 105, and 106), WZ-(1, 2, and 3), CZ-2, SZ-(6, 10, and 12), NZ-24, UNK-(1, 2, 3, 4, 5, and 6) and VV-1* was received on 21 August 2002 for Air Force and regulatory review. Comments were due by 16 September 2002. Field work is scheduled for fall 2002.

### PARD

**Contract Number:** F41624-97-D-8017

**Delivery Order:** 50

(OU 1 Data Gaps Investigation, Five-Year Review for OU 1, Skeet Range Site Characterization, Groundwater Pesticide (Dieldrin) Investigation, and Landfill Inspections).

- During the 19 July 2001 RPM meeting, it was determined that the *Five-Year Review Report* will be re-issued as a draft version after the Conceptual Site Model (CSM) is finalized this fall 2002.
- The *Geological Conceptual Site Model Report* was received on 10 April 2002 for Air Force and regulatory review. Comments were due by 8 May 2002. The distribution of the *Hydrogeological Conceptual Site Model Report* is pending additional funding under projects HUUA20027003a and HUUA20027003b. A FLA request was submitted on 23 July 2002 to AFBCA/HQ.
- The *Draft Final, Long-Term Maintenance & Monitoring Plan for Landfills* was received on 6 June 2002 for Air Force and regulatory review, and comments were due by 9 July 2002. EPA response was received on 9 July 2002 by e-mail stating that they no comments. **No RWQCB comments have been received.**
- The *Draft Final, Groundwater Pesticide Investigation Report* was received on 12 August 2002 for Air Force and regulatory review, and comments were due by 11 September 2002. RWQCB comments were received by e-mail on 14 August 2002. The final version is scheduled to be issued on 23 September 2002.
- The *Draft, Phase II Pesticide Investigation Sampling and Analysis Addendum* is scheduled to be issued on 7 September 2002 for Air Force and regulatory review. Comments will be due by 6 October 2002.
- The *Draft, Sampling and Analysis Addendum, Background and Compliance Well Installation For OU 3 Landfills DP-03, DP-04, LF-12 and LF-14* is scheduled to be issued on 3 September 2002 for Air Force and regulatory review. Comments are due by 2 October 2002.

### PARD

**Contract Number:** F41624-97-D-8017

**Delivery Order:** 69

(IRP Site OT-69 Characterization, Basewide Well Maintenance and Development, Deep Production Well Decommissioning, Basewide Groundwater Monitoring).

- The destruction of five of the six wells was started on 16 July 2002 and was finished on 2 August 2002. The destruction of the sixth well (26N3) was placed on hold until the Air Force and Mojave Water Agency (MWA) could work out a possible transfer of the wells to MWA. On 23 August 2002, MWA declined the acceptance of ownership of wells 26N3, 27N1, and 30F2. Therefore, these wells will be decommissioned this fall 2002.
- The *Draft Final, 2001 Annual Basewide Groundwater Monitoring Report, Operable Units 1, 2, and 3* was received on 20 August 2002 for Air Force and regulator review. Comments are due by 16 September 2002.

## TolTest, Inc.

Contract Number: F41624-01-D-8543

### **Environmental Remediation and Construction (ENRAC) Contract Delivery Order: 6**

(PAH Removal and Lead Shot Recovery at the Second Skeet Range).

**PAH soil removal and lead shot recovery at the Second Skeet Range project will be performed in conjunction with the company TolTest, Inc. from Toledo, Ohio as the prime contractor and Montgomery Watson Harza (MHW) as their subcontractor.**

- The latest schedule change e-mail dated 19 August 2002 stated the lead shot recovery is scheduled to begin the evening of 15 September 2002 with property transfer being scheduled for 25 November 2002. Grubbing of the native vegetation was performed on 21-23 August 2002. The local reuse authority (LRA) is still extremely interested in the completion date of this project.
- The ***Draft, Work Plan for Soil Removal and Lead Shot Recovery at the Second Skeet Range*** was received on 12 August 2002 for Air Force and regulatory review. Comments are due by 1 September 2002. RWQCB comments were received on 16 August 2002, and EPA comments were received on 22 August 2002. The final report is scheduled to be issued on 13 September 2002.

## Shaw Environmental and Infrastructure, Inc.

Contract Number: F41624-00-D-8026

### **Delivery Order: 05**

(Treatability Study Continuation for OU2, OU 2 Extraction Well Installation, and OU 2 Well Re-development).

- The three mobile units extracted free product from wells EX-02, EX-03, MW-06, MW-10, MW-18, MW-19, MW-24, and MW-104. The seven permanent units at wells EX-04, EX-08, EX-11, EX-13, MW-04, MW-05, and MW-08 have been operating continuously since the piping upgrade was completed.
- The free-product recovered for the month of August 2002 was approximately **1,610 gallons** from the seven permanent units and three mobile units. This amount is estimated because the flow meters on the stainless steel piping to the existing four permanent units (EX-08, MW-04, MW-05, and EW-08) and the two new permanent units (EX-11 and EX-13) are not accurate. More accurate flow meters are being evaluated for purchase and installation, but it was estimated that 1,163 gallons of the monthly total (72.2%) was recovered from the six permanent systems. Also, extraction well EX-04 contributed 219 gallons (13.6%) of the total product. The three mobile units contributed 91 gallons (5.6%) from well EX-03 and 137 gallons (8.54%) from several wells located around the tarmac. Since February 1992, a cumulative total of **179,302 gallons** (21.6%) of free-product has been recovered of the estimated 832,000 gallons.
- The ***Final, Monitoring Well Installation Work Plan, Operable Unit 2*** is scheduled to be issued on 11 September 2002, and field work is scheduled for 9 September 2002 for the drilling and installation of six monitoring wells.
- On 21 August 2002, free product samples were collected from wells MW-04, MW-17, MW-63, and MW-104, and were tested for density and chemical analysis. The chemical analysis is to determine percent BTEX and remaining hydrocarbon chain range from C1 to C25. These results from wells MW-04 and MW-63 will be compared to the results from the same testing performed in 1998. Free product from monitoring well MW-32 was sampled on 21 August 2002 and tested for MTBE since low concentrations have been detected in downgradient groundwater wells. However, analytical results of the product indicated no MTBE.
- The ***OU-2, Free-Product Recovery System, Informal Technical Information Report (ITIR)*** is scheduled to be issued on 20 September 2002. The reporting period is from 31 March 2001 to 1 April 2002.

## HydroGeoLogic, Inc.

Contract Number: F04699-99-D-0011

### **Delivery Order: 9000**

(Completion of OU2 FS; SVE IRA for Sites ST-54, ST-57, and SS-58).

**The contractor has negotiated the unit cost for propane from \$1.25 per gallon to \$0.20 above supplier cost plus sales tax (~\$0.77) per gallon on 17 July 2002. This will be a 60% reduced in propane cost.**

**Also, the contractor is evaluating the cost and savings for converting the three SVE units to natural gas. The conversion from propane to natural gas was recommended by the Program Peer Review Team (PPRT) on 4 June 2002.**

- The SVE system at Site ST-54 was started on 27 February 2002, and its operation has been continuous, and the destruction efficiency was 99%. On 8 August 2002, a comprehensive vapor sampling event was performed, and the influent vapor samples at the unit had a TVPH as gasoline concentration of 5,760 ppmv and effluent vapor concentrations of 2.2 ppmv. The next influent and effluent vapor sampling event is scheduled for 12 September 2002.
- The SVE system at Site ST-57 was started on 4 June 2002 and its operation has been continuous with a 99% destruction efficiency. On 8 August 2002, a comprehensive vapor sampling event was performed, and the influent vapor sample at the unit had a TVPH as gasoline concentration of 7,870 ppmv and the effluent vapor concentration of 3.1 ppmv. The next influent and effluent vapor sampling event is scheduled for 12 September 2002.
- The SVE system at SS-58 was started-up on 11 February 2002, and its operation has been continuous with a 99% destruction efficiency. On 8 August 2002, a comprehensive vapor sampling event was performed, and the influent vapor samples at the unit had a TVPH as gasoline vapor concentration of 673 ppmv and the effluent was 1.7 ppmv. The acetone influent vapor concentration was 6,070 ppbv and effluent was 7.6 ppbv. On 16 August 2002, a catalytic converter was installed to make the SVE system for more fuel efficient, and the propane consumption has been reduced dramatically. The next influent and effluent vapor sampling event is scheduled for 12 September 2002.
- The ***Preliminary Draft, Design Analysis Report, Operable Unit 2-Sites ST-54 and ST-57 Soil Vapor Extraction System*** was received on 3 June 2002 for Air Force review, and comments were due by 14 June 2002. Air Force comments were received on 16 July 2002. **No EPA or RWQCB comments have been received.**
- The ***Preliminary Draft, Feasibility Study, Operable Unit 2*** was received on 14 June 2002 for Air Force review, and comments were due by 12 July 2002. Air Force comments were issued on 12 August 2002. The draft version is scheduled to be issued on 19 September 2002 for regulator review.
- The ***Preliminary Draft, Operable Unit 2 Process Report*** was received on 12 August 2002 for Air Force review, and comments are due by 13 September 2002.

## Other Items/Issues

RPM and/or RAB Meetings, Telephone Conference Calls, or Technical Meeting.	<ul style="list-style-type: none"> <li>The upcoming BCT meeting is scheduled for 29 October 2002 at 0900 hours at the George AFB field office in Victorville, CA. A pre-RPM meeting between AFBCA, AFCEE, Mitretek, and the contractors is scheduled for 1100 hours on 28 September 2002 at the George field office.</li> <li>The Restoration Advisory Board (RAB)/Public Meeting is scheduled for 29 October 2002 at 1900 hours at a location to be determined.</li> <li>A conference call between the Air Force and the contractors is scheduled for 16 September 2002 to discuss the upcoming field work schedule of the Second Skeet Range. Another conference call with the regulators is scheduled for 18 October 2002 to discuss the Draft, OU 2 FS.</li> <li>A Real Estate meeting with the LRA to discuss property transfers is scheduled for 18 September 2002 at 1000 hours at City Hall, Victorville, CA.</li> </ul>
Fiscal Year 2003 Programming Documents.	<ul style="list-style-type: none"> <li>A completed set of the Program Peer Review (PPR) comments were received via e-mail on 19 July 2002. The 24 FY03 projects were revised and distributed on 23 August 2002.</li> <li>A FY02 programming narrative for the continued third-party technical assistance and support from Mitretek was prepared and delivered to the AFBCA/BEC on 16 July 2002 for review and funding. On 16 August 2002, an e-mail message from AFCEE stated that they have received the funding, and will be sending request for proposal (RFP). A FY03 programming document was included along with the 24 FY03 projects.</li> </ul>
Local Reuse Authority (LRA) Tenant	<ul style="list-style-type: none"> <li>The LRA had a site walk on 8 August 2002 with their potential tenant in the Skeet Range area, and they agreed to give the tenant two weeks to make a decision on this site for their facility. A warehouse will be constructed over the Second Skeet Range site.</li> </ul>
Asbestos Abatement to IRP Site LF-35	<ul style="list-style-type: none"> <li>On 26 April 2002, the LRA issued a <b><i>Draft Final, Asbestos Abatement Work Plan</i></b> for landfill Site LF-35 for regulatory review. On 9 August 2002, General Electric (GE) had a ground breaking ceremony at IRP Site LF-35. The asbestos abatement was completed on 28 August 2002, but the Air Force and RWQCB have scheduled a visual site inspection within a week of this area. The construction of an aircraft maintenance hanger was started on 26 August 2002.</li> </ul>
Supplemental Environmental Baseline Survey (SEBS) and Finding Of Suitability To Transfer (FOST).	<ul style="list-style-type: none"> <li>The <b><i>Final, Basewide SEBS and FOST for Subparcels A-1, A-3 through A-7, A-17 through A-25, A-27, B-11, C-7, C-8, C-17, C-21, D-2, D-12, D-15, D-16, G-1, G-3, H-1, and the Southern Portion of C-3 and D-13</i></b> (total of 1,315 acres) was delivered to AFBCA/Headquarters on 19 June 2002 for the director's signature. After conversions with the AFBCA lawyer, the Basewide FOST and SEBS will be re-written to leave out Subparcel C-21 (Original Skeet Range which is ~30 acres), and will be submitted for another 3-day review to EPA.</li> <li>An updated VSI was performed to the Subparcels C-18 through C-20, C-22, and the southwest portion of C-14 facilities on 23 July 2002. The VSI's were sent to AFBCA/McClellan for preparation of the deed.</li> <li>The <b><i>Final, SEBS and FOST for Subparcel D-5B</i></b> (total of 10 acres) was received at AFBCA/Headquarters on 29 July 2002 for the director's signature.</li> </ul>